

DETAILED ACTION

Response to Amendment

1. Examiner notes the amendments to the claims filed 4 MAR 2008.
2. Claims 1-2 are canceled. Claims 3-26 are pending.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 3-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams (U.S. Patent 4,545,531, hereinafter '531) in view of Smrt (U.S. Patent 3,700,144, hereinafter '144), Harley (U.S. Patent 3,335,468, hereinafter '468), Dooley Jr (U.S. Patent 2,860,898, hereinafter '898), Deola (U.S. Patent 4,856,773, hereinafter '773) and Fietcher et al (U.S. Patent 3,505,742, hereinafter '742).
6. Claim 3 – '531 teaches a method and apparatus for spray paint marking.

- a. The apparatus comprises:
 - i. A spray paint can in a spray paint can holder (Column 4 Lines 30-57, Figure 4 Item 97 and 72);
 - ii. A trigger mechanism attached to the spray paint can holder to activate the spray paint can (Column 5 Lines 3-49 and Figure 5);
 - iii. Said spray paint can holder being adjustable between vertical and angular positions relative to the horizontal main frame (Column 4 Lines 22-29);
 - iv. A pair of roller brackets attached horizontally and perpendicularly to the main frame (Column 2 Line 66 - Column 3 Line 2 and Figure 1 Items 24 and 26);
 - v. A pair of rollers mounted on a horizontal axis with a vertical rotation (Column 2 Line 66 – Column 3 Line 2 and Figure 1 Items 20 and 22);
 - vi. A center and push handle bracket attached to the main frame (Column 3 Lines 60-67 and Figure 2 Item 42);
 - vii. A carrying handle and guide brackets attached to the center bracket (Column 3 Lines 60-67 and Figure 1 Item 38; the handle serves as a guide bracket for the cable);
 - viii. A handle grip and trigger mechanism attached to a push handle which is attached to the push handle bracket (Column 3 Lines 60-67 and Figure 1 Items 40, 100 and 38);

- ix. Wherein the cable is held in tension and in a non-triggering mode by a tension spring attached to the cable running between the handle trigger and the spray paint can holder trigger along the vertical length of the main frame (Column 5 Lines 3-47, specifically Lines 36-49 discussing the bias spring of Figure 5 Item 124).
- b. The apparatus of '531 does not teach the following structures:
 - x. Multiple simultaneously activated spray cans.
 - xi. A cable connector bar moveable connected to the center bracket and to a plurality of cables.
 - xii. A cable connecting the handle trigger and the cable connector bar.
 - xiii. A plurality of cables connecting between the cable connector bar and tension adjustment hooks.
 - xiv. Tension adjustment hooks connecting to tension adjustment bars.
 - xv. Tension adjustment bars connecting to triggering cables.
 - xvi. Cable guidance by a plurality of pulley rollers.
- c. '144 teaches an apparatus for spray paint marking of surfaces using a cable actuation system to simultaneously trigger multiple spray paint canisters. '144 teaches that multiple spray paint canisters being activated simultaneously allows for a wider and more versatile area of coverage (Column 4 Lines 15-28). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have combined the apparatuses of '531 and '144 because both apparatuses want to apply paint to surfaces and '144

allows for a wider area of coverage. '144 also teaches a cable connector bar moveably mounted to the center bracket of the spraying apparatus (Column 2 Lines 45-65, Figure 5 Item 46). '144 also teaches the concept of tension control by providing tensioning clips to adjust the slack in the actuation cable (Column 3 Lines 20-31, Figure 1 Items 64 and 65).

d. '468 teaches a device for securing multiple cables to a single support mechanism. The device is a multi-slotted metal plate with channels and slots which allow cables to be locked into place in the plate (Column 2 Line 60 – Column 3 Line 20). This device is rotationally mountable to a fixture, which would allow a pull in one direction to rotate the fixture and provide tension on the other cables attached to the fixture, allowing the apparatus of '531 to simultaneously actuate multiple triggering mechanisms via cables. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have combined the apparatus of '531/'144 with the device of '468 because '531 teaches cable actuation of trigger mechanisms, '144 teaches the desirability of simultaneous multiple actuation of spray canisters, and '468 teaches a device capable of integrating both procedures.

e. '898 teaches a device for coupling cables which allows for internal tension adjustment of the cable system it is integrated into. This device consists of a cylinder with a hook at each end. The hook at one end is threaded to allow for adjusting the length of the coupler; the hook at the other end is attached to an internal spring mechanism (Column 1 Lines 40-57 and Figure 1). By adjusting

the length of the coupler, the tension in the cable system is adjusted (as the length of the connector determines in part the tension on the spring in the connector). '144 speaks to controlling the tension of the cable actuation system. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have combined the apparatus of '531/'144/'468 with the device of '898 because '144 wants to control the tension of the cable actuation system and '898 teaches a device which allows for the control of tension in each individual portion of the actuation system.

f. '773 teaches a weightlifting device which uses a series of cables and pulleys to control the direction in which tension is applied to the cabling system. This allows for the operation, or triggering, of the weightlifting device in multiple orientations as the rollers redirect the cable in desired directions (by way of example, Column 10 Line 33 – Column 11 Line 10 related to Figure 3). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have combined the apparatus of '531/'144/'468/'898 with the technique of '773 because '144/'898 want to control the tensile forces in the spraying apparatus and '773 teaches that pulley rollers can be mounted and applied in configurations desirable for controlling the direction of tensile forces in a system.

g. '742 teaches a method for marking desired locations with a spray-paint marking apparatus. The method comprises:

- xvii. Positioning the apparatus on the railroad track such that the rollers are perpendicular to the railroad track;
- xviii. Placing the spray paint cans in the spray paint holders;
- xix.
- xx. Moving the apparatus to the location to be marked;
- xxi. Identifying the railroad ties that need to be adjusted;
- xxii. Stopping the apparatus over the surface to be marked;
- xxiii.
- xxiv. Activating the trigger to mark the surface;
- xxv. Releasing the trigger once the desired mark is made; and
- xxvi. Continuing to push the apparatus down the railroad track looking for more portions of railway that need work. (Column 2 Line 28 – Column 4 Line 48).

h. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have combined the method of '742 with the apparatus of '531 et al because '742 teaches that it is known to mark railroads ties for maintenance purposes and '531 et al teaches an apparatus capable of the purpose.

7. Claim 4 – Claim 4 serves only to replicate the spraying apparatus of Claim 3 downstream of the cable connector. The art cited in Claim 3 discloses the claimed invention except for the presence of more than two simultaneously triggered spray cans. It would have been an obvious matter of design choice to provide the desired number of

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simultaneously triggered spray cans, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. The method additions are covered in the scope of Claim 3 above.

8. Claims 5 and 6 – ‘531 teaches a plurality of spray paint cans having shaped nozzles (inherent) and clips attached to hold them in place and a plurality of holders designed to accept the nozzle of the spray paint canister and keep it aligned with the desired direction of spray (Column 4 Line 58 – Column 6 Line 2). The method additions are covered in the scope of Claim 3 above.

9. Claims 7-10 – ‘531 teaches the use of disk masks to control the width of spray (Column 4 Lines 1-21). The masks are attached to the paint can holders via the main frame of the apparatus, inherently block the wind passing perpendicularly to their surface and inherently have a minimum degree of flexibility (all solid matter deforms at least slightly before breaking).

10. Claims 11-18 – ‘531 teaches the presence of spare paint can holders (Column 3 Lines 49-59).

11. Claim 19 – the only difference between Claim 3 and Claim 19 is that the railroad track is being marked instead of the railroad ties. ‘531 discloses the ability to mount the spray paint canister such that it can mark a surface perpendicular to the ground (Column 4 Lines 22-29).

12. Claim 20 is rejected on the same grounds as Claim 5 above, the singular difference being that it depends from Claim 19 as opposed to Claim 3.

13. Claims 21-22 – Claims 21-22 are rejected on the same grounds as Claims 7-10.
14. Claims 23-26 – Claims 23-26 are rejected on the same grounds as Claims 11-18.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL G. MILLER whose telephone number is (571)270-1861. The examiner can normally be reached on M-F 7-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on (571)272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner, Art Unit 1792

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